

IN THE SPECIFICATION:

Please replace paragraph [0077] with the following paragraph:

[0077] The first dielectric layer 510 of the oxidized organosilicon compound is deposited on a first silicon carbide barrier layer 512 on the substrate surface. The first dielectric layer 510 is then plasma treated according to the process described herein. Alternatively, a silicon oxide cap layer (not shown) may be deposited in situ on the first dielectric layer 510 by increasing the oxygen concentration in the silicon oxycarbide deposition process described herein to remove carbon from the deposited material. An etch stop (or second barrier layer) 514 of a nitrogen doped silicon carbide is then deposited on the first dielectric layer 510. The etch stop 514 may have a nitrogen free silicon carbon capping layer deposited thereon. The etch stop 514 is then pattern etched to define the openings of the contacts/vias 516. A second dielectric layer 518 of an oxidized organosilane or organosiloxane is then deposited over the patterned etch stop.

Please replace paragraph [0091] with the following paragraph:

[0091] The metallization structure is then formed with a conductive material such as aluminum, copper, tungsten or combinations thereof. Presently, the trend is to use copper to form the smaller features due to the low resistivity of copper ($1.7 \text{ m}[\text{W}]\Omega\text{-cm}$ compared to $3.1 \text{ m}[\text{W}]\Omega\text{-cm}$ for aluminum). Preferably, as shown in Figure 4G, a suitable barrier layer 524 such as tantalum nitride is first deposited conformally in the metallization pattern to prevent copper migration into the surrounding silicon and/or dielectric material. Thereafter, copper 526 is deposited using either chemical vapor deposition, physical vapor deposition, electroplating, or combinations thereof to form the conductive structure. Once the structure has been filled with copper or other metal, the surface is planarized using chemical mechanical polishing, as shown in Figure 4H.